CLAIMS:

1.          Method of handling a group of at least one data object by issuing a data
handling request to be processed by a storage device organised in allocation units by
execution of at least one storage device request in a pre-determined data handling period, the
method comprising the steps of:

5     a)      determining the number of data objects to be handled in the data handling period;

      b)      determining an upper boundary for the number of allocation units involved for the
              data handling request;

      c)      determining an upper boundary for the number of storage device requests by
              multiplying the number of data handling requests as determined in step a) and the

10            upper boundary of the number of allocation units involved;

      d)      determining an upper boundary for an amount of time consumed by execution of the
              data handling request for handling the data objects during the data handling period by
              determining the amount of time needed for execution of the number of storage device
              requests as determined in the previous step;

15    e)      reserving an amount of time as determined in the previous step in a data handling
              period for execution of the storage device requests; and

      f)      handling the data objects by executing the storage device requests.

2.          Method according to claim 1, wherein

20    a)  the maximum size of the data objects is substantially smaller than the size of allocation
          units;

      b)  the data objects are stored non-contiguously at a substantially equal logic distance from
          each other such that multiple data objects can be stored in one allocation unit;

      c)  the step of determining an upper boundary for the number of allocation units involved per

25        data handling request is replaced by the step of determining an upper boundary of the
          number of data objects determined in step a) of claim 1 spaced at the substantially equal
          logic distance that is stored fragmented; and

d)   the step of determining an upper boundary for the number of storage device requests is replaced by the step of taking the sum of the number of data handling requests and the number of data objects determined in step c) of this claim.

5    3.            Method according to claim 1, wherein the method comprises the steps of:

a)   determining the size of one allocation unit;

b)   determining the maximum size of a data object; and

wherein the upper boundary for the number of allocation units involved is determined by the following expression:

10           [number of allocation units involved] $\leq$

[maximum size of a data object] / [size of one allocation unit] + 2

4.            Method according to claim 2, wherein the method comprises the steps of:

a)   determining the maximum distance between the data objects;

15   b)   determining the size of one allocation unit;

c)   determining the maximum size of a data object; and

wherein the upper boundary for the number of allocation units involved is determined by the following expression:

[number of storage device requests] $\leq$

20           [number of data handling requests] + ( [number of allocation units involved] - 1 )

wherein is the upper boundary of the number of allocation units involved in execution of the data handling requests is determined by the following relation:

[number of allocation units involved] $\leq$ ( [number of data handling requests] $\times$

( [maximum distance] + [maximum size] ) / [size of allocation unit] ) + 2

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5.            Method according to claim 1, wherein the data objects are video frames comprised by a stream of audiovisual data.

6.            Method according to claim 5, wherein the stream of audio-visual data

30   comprises inter-coded and intra-coded frames.

7.            Method according to claim 6, wherein the multiple data objects to which the data handling requests are related are at least some of the intra-coded frames

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8.          Method according to claim 1, wherein step d) comprises the step of
multiplying the upper boundary for the number of storage device requests by an amount of
time consumed by a storage device request.

5    9.          Method according to claim 8, wherein the amount of time is pre-determined.

10.         Method according to claim 1, wherein the storage device is a disk drive and
the determination of the upper bound for the amount of time further takes into account at
least one of the following parameters:

a)   the amount of time required for one revolution of a disk;
b)   the seek time of a pick-up unit of the disk drive to a location on a disk where a data object
     is located to which the data handling request is aimed; and
c)   the time needed to retrieve the data object to which the data handling request is aimed.

11.         Method according to claim 2, wherein the storage device is a disk drive and
the determination of the upper bound for the amount of time further takes into account at
least one of the following parameters:

a)   the amount of time required for one revolution of a disk;
b)   the seek time of a pick-up unit of the disk drive to a first location on a disk where a first
     data object is located to which the data handling request is aimed; and
c)   the time needed to retrieve the data object to which the first data handling request is
     aimed; and
d)   the time needed for the pick-up unit to move from the first location on the disk to a
     second location on the disk where a second, subsequent data object is located to which
     the data handling request is aimed.

12.         Method according to claim 1, wherein the determination of the upper
boundary for the number of allocation units involved per data handling requests comprises
the step of dividing the size of the data object by the size of one allocation unit.

13.         Apparatus for handling a group of at least one data object by a data handling
request to be processed by at least one storage device request handled in data handling
periods, the data handling to be performed by a storage device organised in allocation units,
the apparatus comprising a central processing unit conceived to:

a) determine the number of data objects to be handled per data handling period;

b) determine an upper boundary for the number of allocation units involved per data handling request;

c) determine an upper boundary for the number of storage device requests by multiplying the number of data handling requests by the upper boundary of the number of allocation units involved;

d) determine an upper boundary for an amount of time consumed by execution of the storage device requests for handling the data objects during one data handling period by multiplying the upper boundary for the number of storage device requests by an amount of time consumed by a storage device request;

e) reserve an amount of time as determined in the previous step in a data handling period for execution of the storage device requests; and

f) handle the data objects by executing the storage device requests.

14.       Computer programme product enabling a computer to be programmed to execute the method according to claim 1.

15.       Record carrier carrying computer programme product according to claim 14.

16.       Programmed computer enabled to execute the method according to claim 1.